



Project Description:

I-95 New Haven Harbor Crossing Corridor Improvement Program



Project Scope:

The I-95 New Haven Harbor Crossing (NHHC) Corridor Improvement Program includes improvements to approximately 11.5km (7.2 mi.) of Interstate 95 in New Haven, East Haven and Branford. The program limits extend on I-95 from Interchange 46 (Sargent Drive/Long Wharf Drive, New Haven) to Interchange 54 (Cedar Street, Branford).

Financial Sources:

Federal: 82%State: 18%

Budget Analysis:

• Forecast Program Cost: \$2.01 billion

• Expenditures to date: \$1,018.7 million

Schedule Analysis:

• Percent completed: Design 98%, Rights-of-Way 99%, Construction 48%

• Scheduled completion date: November 2016

• Forecasted completion date: November 2016

Challenges and Risks:

- Managing resources such as labor and federal/state funds during peak construction of Contract B and Contract E.
- Significant delay to Contract E or Contract B, due to their dependency upon each other, poses a risk for either Contract to finish and must be monitored.





ACTIVE CONTRACTS

State Project No. 92-532 (Contract B) (31% Complete, \$416.1 million)

Contract B, located in New Haven, consists of the construction of a new Pearl Harbor Memorial Bridge (Q-Bridge) carrying Interstate 95 over the Quinnipiac River. The project includes approximately 1,500 meters (1.0 mile) of I-95 from the western project limit at approximately East Street to the eastern project limit just east of Stiles Street.

The main harbor crossing will be a 308.7 meter "extradosed" cable-stayed bridge consisting of a 157 meter main span and two 75.9 meter back spans. The West Approach will be a 9 span, 500 meter composite steel plate girder viaduct. The East Approach will be a 10 span, 600 meter composite steel plate girder viaduct. The new Pearl Harbor Memorial Bridge and approaches can accommodate five travel lanes in each direction as well as full inside and outside shoulders.

Recent Activity in 2012:

Main Span:

- Continued deck segmental construction and installation of stay cables at Tower Piers 2 and 3.
 14 out of 16 stay cables are complete.
- o Completed installing ladders and platforms in Anchor Pier 3 Leg.

Marine Work:

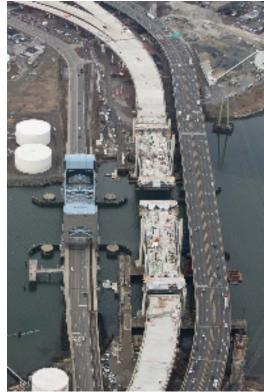
o Continued construction of temporary work trestles and foundations.

East and West Approaches:

o Completed construction of modular expansion joints, remaining cast-in-place barrier

sections, and miscellaneous highway electrical items.









State Project No. 92-531/622/627 (Contract E) (9% Complete, \$356.8 million)

Contract E, located in New Haven, consists of the reconstruction of the I-95/I-91/Route 34 Interchange. The project includes the reconfiguration of the Interchange to eliminate left lane exit and entrance ramps and provide for two lane interstate-to-interstate connections to the extent possible. The project includes reconstruction of approximately 1,600 meters (1 mile) of I-95 from Interchange 46 (Sargent Drive/Long Wharf Drive) to the eastern project limit near East Street and approximately 1,100 meters (3,500 feet) of I-91, to the northern project limit at Bridge No. 03043 (I-95 over Ives Street).

To provide a two-lane interstate to interstate connection from I-95 SB to I-91 NB, improvements to I-91 NB from Ives Street to Interchange 3 are required. The I-95 SB to I-91 NB 2-Lane Connection includes construction of a 1,200 meter operational lane from the Ramp P junction to a lane drop at Interchange 3. Widening of three bridge structures, construction of retaining walls and installation of noise barrier are required along with drainage, illumination, signing and IMS modifications.

The reconstruction will provide three travel lanes with full shoulders on I-95 through the Interchange, construction of twenty-one bridges and retaining walls, new drainage systems, signing and lighting.

Recent Activity in February 2012:

- o Completed installation of production piles for future mainline I-95 (BR 172) and continued installation of production piles for future I-95 NB over RT 34 EB (BR 6609).
- Installed reinforcing steel and concrete for footings and columns for future I-91 SB over Wooster Street on-ramp (BR 3039)
- Completed soil nail walls and began installation of soldier pile and lagging at the Grand Avenue Bridge (BR 3083).
- Continued substructure construction of the Chapel Street Bridge and shoulder widening along I-91 NB between the Chapel Street Bridge and Exit 2 (Hamilton Street).
- o Continued removal of footings at Canal Dock Road Bridge and began pulling existing piles.
- o Continued bridge demolition at various bridges.
- Continued installation of drainage structures at Ramp F, electrical work on I-91 NB, survey, and environmental control work.









COMPLETED CONTRACTS:

State Project No. 14-173 (Contract D) (100% Complete, \$38.7 million)

Contract D, located in Branford, consisted of the reconstruction of approximately 3350 meters (2.1 miles) of I-95 from the western project limit at the eastern abutment of the Lake Saltonstall Bridge to the eastern project limit at Interchange 54 (Cedar Street).

The reconstruction, completed in July 2004, provided three travel lanes in each direction, increased shoulder widths and a new median barrier throughout the project. The project included two new retaining walls, replacement/rehabilitation of two bridges, three culverts, new drainage systems, signing, lighting and noise barrier walls as well as improvements to Cedar Street (Interchange 54) and a new commuter parking lot at Interchange 55.

State Project No. 43-122 (Contract C1) (100% Complete, \$52.5 million)

Contract C1, located in East Haven, consisted of the reconstruction of approximately 2,000 meters (1.25 miles) of I-95 from the western project limit at the New Haven/East Haven town line to the eastern project limit at the east abutment of the Lake Saltonstall Bridge.

The reconstruction, completed in August 2006, provided three travel lanes in each direction, full shoulders and a new median barrier throughout the project. The project included new retaining walls, replacement of four bridges, two culverts, new drainage systems, signing and lighting as well as full reconstruction of the Frontage Roads in East Haven.

State Project No. 92-581 (Contract E1) (100% Complete, \$18.6 million)

Contract E1, located in New Haven, consisted of the construction of soil preloading, soil settlement monitoring, associated drainage and utility relocations required to complete the proposed roadway and bridge improvements in the Contract E area. The work, including installation of test piles, pile load tests and vibration/settlement testing/analysis of the Cowles Building, was completed in January 2007.

State Project No. 92-596 (Farnam Court Noise Wall) (100% Complete, \$1.1 million)

The Farnam Court Noise Wall contract included embankment construction and installation of a timber noise barrier from Bridge No. 3083 (I-91 over Grand Avenue) to Bridge No. 3086 (I-91 over Exit 3 Ramp). The work was completed in May 2007.

State Project No. 92-533/92-569 (Contract C2) (100% Complete, \$75.5 million)

Contract C2, located in New Haven, consisted of the reconstruction of approximately 1,500 meters (1.0 mile) of I-95 from the western project limit just east of Stiles Street in New Haven to the eastern project limit at the New Haven/East Haven town line.

The construction, completed in October 2008, included the reconfiguration of Interchange 49 and Interchange 50 into a single interchange accessed by a connector road between Stiles Street and Woodward Avenue. The reconstruction accommodates five travel lanes in each direction from the western project limit to the reconfigured Stiles/Woodward Interchange, and from that point four travel lanes to the eastern project limit. Full shoulders and a new median barrier were provided as well as replacement of five bridges, construction of retaining walls, new drainage systems, signing and lighting.





State Project No. 43-125 (Contract D1) (100% Complete, \$4.3 million)

Contract D1, located in Branford and East Haven, consisted of final milling, paving and striping of I-95 SB in the Contract D area. The work, completed in November 2008, also included resetting catch basins and guide rail as well as milling, joint replacement and repaving of Bridge No. 00186 (I-95 over Lake Saltonstall), installation of ROW fencing and wetland mitigation plantings in Branford, and installation of a noise barrier wall in the vicinity of the Farm River in East Haven.

State Project No. 92-613 (GNHWPCA Force Main Contract) (100% Complete, \$19.5 million)

The GNHWPCA Force Main Contract included the installation of new twin 42 inch diameter HDPE sanitary force mains under New Haven Harbor via directional drilling due to concerns about possible damage to the existing force main pipes during construction of the new Q-Bridge in Contract B. The work was completed in April 2009.

State Project No. 92-618 (Contract B1) (100% Complete, \$136.8 million)

Contract B1, located in New Haven, consisted of stage 1 foundation construction for the new Pearl Harbor Memorial Bridge main span. This included partial construction of construction access trestles, marine enclosures, foundation templates, drilled shafts and tower footings. In addition, construction of footings, piers, structural steel and deck for portions of the NB West Approach and Ramp I were included as well as local roadway improvements in the west shore area and retaining wall and trunkline installations adjacent to Forbes Avenue on the east shore. The work was completed in August 2011.

State Project No. 92-619 (Contract E2) (100% Complete, \$99.0 million)

Contract E2, located in New Haven, is a breakout from Contract E that included construction of the I-95 NB to Route 34 WB 'Flyover' Bridge (Ramp H) along with the reconstruction of the Route 34 WB Bridge over Brewery Street, Abutment 1 for Bridge No. 00172 and three retaining walls. The work also included roadway improvements on I-95 NB and SB in the Long Wharf area, required to shift traffic onto the new Ramp H fly-over structure and open existing Ramp F to 2-lanes of traffic. The Long Wharf improvements included relocation of the Interchange 46 ramps to the south along I-95, construction of an operational lane on I-95 SB from I-91 SB to Interchange 45, and widening of Bridge No. 00166 (I-95 over Long Wharf Drive Extension). The work was completed in November 2011.